

## Department of Beaches and Harbors – Sustainability Efforts

DBH has been working on conserving Departmental resources over the past several years. Shown below is a listing of those efforts:

### Water

- Waterless urinals installed in the public restrooms along the coast
- Artificial turf installed at the RV Park office
- Drought tolerant native vegetation planted in areas at Redondo Beach and Dockweiler Beach.

### Electrical

- LED lights are installed in some beach restrooms
- LED lights installed at the three Dockweiler Beach parking lots
- LED lights installed at the RV Park
- High efficiency HVAC system installed in the administrative headquarters building

### Environment

- The Department doubled the number of alternative fuel vehicles in its fleet within the past year. DBH went from 7.09% of its vehicles being alternative fuel to 15.75%.
- All of the off-highway equipment and heavy vehicles, such as wheel loaders, dozers, trash trucks, and dump trucks are equipped with particulate filter systems.
- Compliance with National Pollutant Discharge Elimination System (NPDES)
- Installation of new highly advanced septic systems for the public restrooms in Malibu

Some of the programs that are planned in the future are as follows:

- Purchasing of alternative fuel vehicles is targeted to be 25% of total fleet within the year
- Installation of EV Charging Stations
- Installation of the bike racks along the coastline
- Cap Project compliance with Low Impact Development (LID)
- Coordination with ISD's energy conservation/sustainability program rebates with utilities
- Drip irrigation and use of smart controllers
- Increased use of drought tolerant plants
- Efforts for Marina del Rey to be recognized as a certified "Clean Marina"
- Complete the installation of the new septic systems in the remaining restrooms at Zuma Beach in Malibu

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**CHIEF EXECUTIVE OFFICE**  
**Survey of Departmental Sustainability Programs**

**Capital Projects**

Subsequent to the Board's establishment of the Sustainable Design Program as a component of the County's Energy and Environmental Policy in 2007, the County's Capital Program has been committed to incorporating sustainable, "green building" technologies into the designs of the County's capital improvement and refurbishment projects.

The ultimate goal of the Program is to support the County's goal of a 20% reduction in energy and resource consumption by 2015. Toward this end, the 2013-14 Capital Program incorporates sustainable design technologies in 144 or 46% of the County's 311 active building projects. Capital Projects is also exploring opportunities to replace existing power plants with renewable energy sources, such as the County's 4 megawatt solar farm in Lancaster that was brought on-line in 2013 and to install solar arrays and energy efficiency elements on the County's existing buildings in 2014.

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**Intergovernmental and External Affairs**

Intergovernmental and External Affairs (IGEA) has nearly eliminated the need to print or copy anything, but doing all of their communication with the Board, Departments and other stakeholders via email.

IGEA's Public Affairs section has eliminated all printing of our daily (twice each day) media reports to the Board, departments and other stakeholders. It is now all tracked, developed and then distributed via email.

All press work is done using the Internet.

IGEA has eliminated their print County Annual Report, and has moved to an all-digital, interactive version, distributed to stakeholders via the Internet, social media.

These changes have resulted in an extraordinary savings in both paper and money.

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**Public Safety Cluster**

The Public Safety Cluster has taken the initiative to permanently reduce paper to perform our daily duties.

Unless required by Board policy and/or Brown Act, all reports, notifications, correspondences and agendas are delivered electronically to our customers.

We have also made great strides to think electronically when archiving all materials. All materials received and produced by Public Safety Cluster are now archived electronically which in turn have saved valuable CEO storage space, paper and money.

Our staff members are also making the effort to reduce the use of electricity by making sure all desk lights are turned off after work hours to eliminate the unnecessary lumination of work desks. This simple effort by our employees is helping the County reduce the use of electricity as well as saving money.

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## **Department of Consumer Affairs**

- **Please briefly describe your department's significant initiatives related to Sustainability. This might include how your department is conserving resources, how you are changing departmental operations or the office environment, how you are changing the way you provide services to the public, etc.**

*DCA usually think of sustainability in terms of changing procedures or operations to conserve resources. Our department does not have specific Sustainability initiatives, but many of our Efficiency initiatives were also sustainability projects. DCA has worked with ISD on a variety of projects such as online intake and case management system (reductions in paper, toner, electricity), default duplex printing (reducing paper), standardized group policies on PCs to put them in sleep mode when not in use (reducing electrical usage). We also had small projects within our department such as changing procedures to convert fax traffic to email (reducing paper) and increasing our use of carpooling on County business to reduce vehicle mileage (reducing use of fuel).*

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# County Counsel Sustainability Report

Objective: Describe steps the Department is taking to endure in the face of limited resources and in the face of external changes such as environmental protection measures and technological advancements while experiencing an increase in demand for services.

**In the past several years and during an economic downturn, the Department has taken several steps to increase its ability to provide excellent service with limited resources.**

- Generated savings by moving some of out sourced services in-house (Business cards).
- Measures were taken to place tighten oversight on expenditures by adjusting current policies to require additional signature approvals and controls (Calendars/Travel policies)
- For all essential services, the Department has taken initiatives to ensure that it was obtaining the best value for the expended resources. (Medical Expert review, Outside Counsel review)
- In addition, organizational structures are reviewed to reorganize assignments to maximize resources, experience and subject matter (Gov't Services, Labor Div, Social Services Div)

**Department is also using technological advances to make business processes more efficient and increase its sustainability:**

- An internal website was created in order to increase the flow of information across the divisions. Increases in communication among employees has been beneficial in keeping staff informed and on the same page.
- Electronic information banks were created to addresses critical space, storage and efficiency issues. This allows the Department to sustain its operations without increasing its space/storage costs. (Brief/Pleading Bank, Opinion/Advice Bank, Appellate Brief Bank)
- Ensuring that computer hardware is up to date and meets the operational needs of the department, thereby greatly reducing chances of costly interruptions. (Computer Refresh)
- An External site is being re-designed to increase its functional value by automating public and client services reducing redundant inquiries and making the process more transparent for the public.
- Enhance billing information to increase transparency and assist other County Departments in managing their budgets for Legal services.

**Department manages its operational sustainability by reducing its operational risks and implementation of audit recommendations:**

- The Department is further improving its information security measures through appropriately staffing information security position, increasing its network controls, providing appropriate training to staff and ensuring that its information security policies are in line with the County's.
- Billing system has been upgraded to include additional information to assist the Department in case budget forecasting. (Matter Management)
- Tracking systems have been put in place to more efficiently manage deadlines (Bankruptcy – Gov't Services)
- Developed and implement processes to further enhance the current Departmental Risk Management Program by ensuring that risk management functions are adequately staffed, ensuring that the department's risk management practices are aligned with the rest of the County and by enhancing current ergonomic and wellness awareness programs to better manage risks associated with employee safety.
- Department is in the process of implementing the recommendations of the management audit performed by HBR Consultants and is in communication with the Board of Supervisors regarding the manner and schedule of the implementation.

**Environmental sustainability:**

- Two sided printing has been set at the default setting for all copiers across County Counsel facilities along with automatic shut-off for all desktops. Both measures have allowed to reduce the County's carbon print.
- The Department is continuing to evaluate new software solutions to minimize paper waste and increase operational efficiency. (i.e. Share Point)

## **DPSS – Departmental Sustainability Efforts**

DPSS has been on a journey to reduce its environmental impact in several ways. As you may know, we service millions of customers per year in approximately 80 facilities throughout the County. We also have approximately 14,000 employees.

Currently, we are engaged in a Business Process Reengineering effort. This will serve to map out more efficient/effective business operations. As a result, the number of in person visits by our participants will be significantly reduced, service time will be improved.

We are embarking on a department wide facilities and space plan. We are looking to incorporate green technology, recycling (water), solar, enhance existing space and maximize mobile technology. We will also evaluate the availability of transit to increase ridership and decrease the carbon footprint caused by both our employees and participants.

Expansion of telework and hoteling will decrease the need for increasing physical space for employees and correspondingly reduce parking needs and decrease traffic. Although we have added several hundred new employees this fiscal year, we have not increased our physical footprint.

We have instituted EDMS which has enabled the conversion of millions of pages of paper to digitized copies, thereby reducing the need for hundreds of filing cabinets in district offices and enhancing our ability to provide service via staff at call centers. Our staff will no longer be directly attached to a paper based case located in a specific office. All of the paper was recycled and the department receives reimbursement from the vendor.

We are investing in mobile technology for both our staff and participants to access work and benefits without having to be in a specific physical location. Your Benefits Now provides participants with the ability to apply on line to file for benefits administered by our Department. This also reduces traffic into our numerous offices.

Routine reporting of case changes by participants can be achieved through mobile scanning and uploading to our site, further reducing visits into our district offices.

DPSS is on a mission to minimize its environmental impact and improve customer service. This list is but a short synopsis of what we are working on. It's all very exciting and requires significant planning and work.

## Department of Public Works Sustainability Efforts

DPW's leadership in sustainability has been demonstrated in DPW Strategic Plan (Plan), where sustainability was identified as one of DPW's Values and was also recognized as one of Five Strategic Focus Areas. Under the Plan, the following initiatives are ongoing:

- In 2011, in order to establish a common platform to define sustainable infrastructure, DPW adopted EnvISlon™, the Institute for Sustainable Infrastructure (ISI) sustainability rating system. EnvISlon™ certification applies to civil infrastructure of all types and provides rating of the project's economic, social, and environmental impact during design, planning, construction, and maintenance phases.
- Recognizing that Sustainability is an organizing paradigm that must apply to DPW mission and the entire business programs, DPW is currently developing a policy on sustainability (Policy). It provides a systematic mechanism to implement sustainability principles in the organization, leadership, personnel, material, facilities, and services. To facilitate this process, the Policy establishes an implementation framework both in organizational structure as well as in business planning. The organization framework identifies key sustainability team members including executive members, sustainability officer, sustainability council, and workgroups. For business planning, sustainability goal areas are identified that are critical to sustainable business programs and services enhancing social wellbeing, environmental resources, and economic health of the community. Sustainability goal areas are then interpreted in DPW's core and cross-cutting service areas using a set of sustainability indicators and performance metrics.

From "Sustainability Value" in DPW Strategic Plan

*"We will act with foresight to ensure the long-term health and well-being of the communities we serve. We will seek a balanced approach to deliver multibenefit projects, programs, and services in an economically, environmentally, and socially responsible way."*

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More Public Works Sustainability programs and information can be found on the Clean LA website: <http://dpw.lacounty.gov/epd/cleanla/default.aspx>

# **ISD Sustainability Programs and Projects**

Below are updates on various programs and initiatives overseen by ISD, as described in the following sections:

1. Programs for Internal County Operations
2. Programs for Los Angeles County and the Southern California Region
3. Public Agency Programs
4. LARC and Other Activities

## **1. PROGRAMS FOR INTERNAL COUNTY OPERATIONS**

### Energy Management Activities

ISD's Energy Management Division continues to provide project implementation and other support for County departments. A list of ongoing activities is provided below.

ISD continues its very successful building retro-commissioning program which "tunes up" heating, ventilating and air conditioning (HVAC) systems to ensure optimal system and equipment performance, which in turn results in energy efficiency and utility savings. Retro-commissioning projects are ongoing at four Sheriff's stations, the Los Padrinos Juvenile Hall, and three health centers.

Using Los Angeles Department of Water and Power (LADWP) litigation settlement funds that were made available in 2007, ISD is installing efficient chillers and ancillary equipment at the LAC+USC Medical Center central plant. These projects are expected to save the facility about 1.8 million kilowatt-hours (kWh) or \$250,000 annually.

ISD continues with high efficiency fluorescent lamp projects in 2014 for Probation Camps, Sheriff Detention Facilities, and various other sites utilizing the Energy Investment Program (EIP) approved by your Board in 2012. The EIP is a "revolving loan fund" program which uses ARRA seed funding to implement efficiency projects. Department buildings which benefit from the projects repay the EIP fund through their utility savings until the project costs are paid back.

ISD is currently developing scopes of work for several library facilities to install energy efficiency measures including solar to reduce the energy usage of the buildings by a minimum of 20 percent. The goal is to reduce the energy usage to achieve as close to zero net energy as possible.

ISD is currently working with the Department of Public Works (DPW), Water Works Division to solicit bids to provide engineering and installation of an optimum fixed flow hydropower pressure reducing turbine at one of DPW's water pumping stations. This turbine will provide green, sustainable, renewable power and will offset electrical consumption at the pumping station by a minimum of 750,000 kWh per year.



Older emissions reduction systems are being retrofitted at the Civic Center Cogeneration Plant, which will also provide operating efficiencies by increasing plant electric output. This project will increase annual revenues for the plant by about \$1.7 million.

Also at Civic Center Cogeneration Plant, a steam turbine generator and cooling tower water pumps are being retrofitted, which will result in increased plant electric output and more efficient operations. The combined results of these projects will result in over \$1 million annual operating costs savings.

ISD also provides ongoing coordination with Public Works, Parks and Recreation, and Sheriff's Department on lighting upgrades, computer server virtualization projects, and efficient pool pump retrofit projects.

ISD is supporting Department of Health Services' Capital Projects program to replace old, inefficient boilers at Rancho Los Amigos Rehabilitation Center. This project is required to meet new South Coast Air Quality Management District (SCAQMD) emissions restrictions.

#### Fleet and Transportation Programs

ISD continues to assist other departments in the areas of fleet and transportation, funded by grants and other sources, to reduce the County's greenhouse gas (GHG) emissions. This work is described below.

ISD assisted the Sheriff's Department in obtaining two Carl Moyer Program grants from the South Coast Air Quality Management District, totaling \$7 million, to help offset the costs of replacing 37 of Sheriff's 82 Prisoner Transportation Buses. The combined emissions from all 37 new buses will produce fewer emissions than just one of the old buses being retired. The first 16 buses are now in service. Nine additional buses are budgeted in the Fiscal Year 2013-14 Budget. ISD is assisting the Sheriff's Department with project management and in fulfilling the technical and reporting terms and conditions of the grant.

As co-lead with the LADWP, ISD and 21 other agencies received an \$840,000 award from the California Energy Commission (CEC) to install Electric Vehicle (EV) charging infrastructure across the County. Leveraging the CEC award, ISD obtained an additional \$193,000 in matching funds from the Mobile Source Air Pollution Reduction Review Committee (MSRC) to install EV charging infrastructure at various County sites. ISD is working with six County departments to install these chargers at 30 sites throughout the County.

With assistance from Southern California Edison (SCE) and LADWP, ISD developed a multi-year Master Purchasing Agreement for EV-charging infrastructure. Twelve firms representing 12 different manufacturers were awarded. This Master Agreement is available to other public agencies throughout the region and will be used by the SCAQMD, LADWP, and even the State.

ISD was part of the Governor's Interagency Working Group on Zero-Emission Vehicles (ZEV) in the development of its "ZEV Action Plan, a Roadmap to 1.5 Million Zero Emissions Vehicles on California Roadways by 2025". ISD has also contributed to the forthcoming "Zero-Emission Vehicles in California: Community Readiness Guidebook" from the Governor's Office of Planning and Research.

### Countywide Green Building Program

As part of continued efforts to support efficiency improvements to existing County buildings, ISD has developed a County Green Building Program that will offer other departments Leadership in Energy and Environmental Design (LEED) certification services, LEED feasibility assessments, technical support for departments seeking to perform their own LEED certification, and other green building measures implementation support. All of these services complement ISD's existing Energy Management services and other sustainability policies adopted by the Board.

As a reporting tool for the Green Building Program, ISD has developed a Green Building Dashboard, which provides County building managers the ability to monitor energy usage and other sustainability measures in selected key facilities. Development and implementation of the Energy Efficiency portion of the Dashboard has been completed and the site went live in June 2012. At the same time the Dashboard went live, it was also linked to the Green L.A. County website ([www.green.lacounty.gov](http://www.green.lacounty.gov)), so that it can be accessed by County facility managers. The Energy Efficiency portion of the Dashboard has fully developed reporting tools, which link into ISD's Enterprise Energy Management Information System (EEMIS) data-gathering program, allowing facility managers to access historic, recent, and, in some cases, real-time energy use data.

The Environmental Programs portion of the Dashboard was developed in a second phase effort, and was launched in June 2013. This component of the Green Building Dashboard is constructed around requirements for LEED certification of existing facilities. The survey and reporting tools are meant to provide guidelines and resources for facility managers to "green" their buildings and operations, particularly as related to best practices in the areas of energy, water, purchasing, cleaning, and indoor environmental quality.

### Municipal Climate Action Plan (MCAP)

In 2010, ISD performed an inventory of all GHG's produced by internal County operations, and developed a baseline report snapshot of emissions for the calendar year 2009. This can now be used to develop a climate action plan, which will identify mitigation measures that the County can implement in order to reduce emissions levels to 1990 levels by the year 2020 (in compliance with AB-32 requirements). In the interim, ISD has continued compiling annual GHG inventories for 2010-2012, so that we can analyze any reductions that have occurred as a result of efficiency measures already in place.

## **2. PROGRAMS FOR THE COUNTY AND THE SOUTHERN CALIFORNIA REGION**

### Energy Upgrade California in Los Angeles County (EUCLA)

EUCLA is a comprehensive energy efficiency program for residential properties that is sponsored by the County, in conjunction with the local investor owned utilities. ISD acquired ARRA grants, which were used to design and implement the initial iteration of this program.

The EUCLA subprograms are described below.

#### HOME UPGRADE & ADVANCED HOME UPGRADE:

These programs provide incentives for comprehensive, energy efficient retrofits in single-family homes by promoting interactive combinations of measures such as: insulation, HVAC equipment replacement, duct replacement/repairs, air sealing, radiant barriers, hot water systems, etc., rather than incentivizing individual equipment replacement.

#### MULTIFAMILY HOME UPGRADE:

Similar to the Basic and Advanced Home Upgrades for single-family homes, this program provides incentives to multi-family building owners to assess and implement comprehensive, interactive energy measures. The Multifamily Home Upgrade Program also promotes energy upgrades for portions of buildings where utilities are paid by both the tenants and the landlord.

#### ENERGY CHAMPIONS:

This program utilizes non-profit community organizations (e.g.; Community College and University Alumni Associations) that have organized networking sources within their community to promote EUCLA and generate project leads. These organizations will receive an incentive when they can verify that an EUCLA project was completed due to their lead generation.

#### GREEN BUILDING LABELING (GBL):

This program consists of outreach, training and community workshops at various events to recruit and educate realtor professionals on the value of green building certification and green elements in home upgrade projects. This program also provides workshops targeted to real estate professionals so they may educate homeowners on the value of whole house energy efficiency retrofits during a home sale.

#### SOCIAL MEDIA:

EUCLA uses current social media outlets to reach target audiences in order to promote and educate the public about EUCLA. Social media offers various ways to encourage program participation, disperse energy-saving tips and environmentally friendly news stories, and help build a sustainable connection between EUCLA contractors and potential participants.

#### CONTRACTOR CO-OP MARKETING:

This program assists participating EUCLA contractors by providing matching funds reimbursements to contractors who conduct their own marketing and advertising. The contractor marketing and advertising materials must meet EUCLA brand guidelines to receive the matching funds.

#### ASSESSMENT VOUCHERS AND DISCOUNT COUPONS:

This program provides vouchers and discount coupons to homeowners interested in pursuing EUCLA upgrades. Vouchers and coupons help overcome the first step costs of an EUCLA Advanced Home Upgrade project, which requires a home energy assessment. Vouchers are used to fully offset the costs of the home assessments; discount coupons offset some of the home assessment costs.

#### HVAC CONTRACTORS:

The HVAC Contractor program supports the general contractor community (mostly HVAC contractors) by providing a financing program incentive called Cool Comfort Financing, which is designed to help drive homeowners to choose energy efficient replacement equipment, and possibly additional efficiency improvements as part of their projects. The program also requires contractors to comply with the permitting process for associated projects.

#### EUCLA SINGLE FAMILY HOME FINANCING:

Through a partnership with Matador's Credit Union, single family homeowners may finance their EUCLA Home Upgrade projects. Matador's Credit Union provides a 4.99%, 5-year term, unsecured loan of up to \$40,000 to qualified borrowers. In order to generate initial program participation with competitive terms and conditions, the

program uses a loan loss reserve credit enhancement, which helps protect the lender against losses due to defaulted loans.

#### NON-RESIDENTIAL PROPERTY ASSESSED CLEAN ENERGY (PACE) FINANCING:

ISD and the Treasurer & Tax Collector (TTC) are working together to administer a countywide PACE financing program for non-residential properties. The program provides financing through County issued bonds for private sector energy projects, which are then paid back through assessments placed on the building owners' property tax statements. The program also provides marketing, education, recruitment, and technical support to property owners. The program's first PACE assessment was funded in July of 2013 and has an active application pipeline of over 40 projects.

### **3. PUBLIC AGENCY PROGRAMS**

#### Southern California Regional Energy Center (SoCalREC)

Using ARRA and CPUC grant funding, ISD has developed a program to support the implementation of energy efficiency projects in public agency buildings and facilities throughout the Southern California region, the SoCalREC. This program was initially piloted by providing the following centralized services to assist other local governments: technical support in the form of detailed audits; engineering and project management services; procurement support in developing standardized project and vendor solicitations and contract agreements; and expansion of ISD's EEMIS by allowing other entities to procure EEMIS related services and support. With the termination of the ARRA grants, this program will be funded using CPUC resources. The SoCalREC sub-programs are described below.

#### PUBLIC AGENCY BUILDING RETROFITS:

This program will continue to offer technical support for integrated, comprehensive retrofits in local government buildings and facilities. The services are provided through centralized and standardized processes which include: detailed audit and engineering, project solicitations, project management, public agency financing (described later) and project commissioning support. This program, in this form, mitigates the need for all public agencies to develop comprehensive, in-house resources to assess and implement projects. These services complement services provided by the utilities (e.g., initial audits and incentives processing).

The program will also pilot the provision of these services to other public agencies like water districts, transportation agencies and schools.

AGGREGATED PROCUREMENT:

This program simplifies and standardizes the process for public agencies to identify and implement single measure energy improvements, select vendors, manage bid processes and pricing, track energy savings and finance projects. The program is similar to ISD's Master Agreement process for energy projects in that it pre-qualifies vendors to do the work and utilizes a standard, pre-approved agreement, which the public agencies would execute with the vendors.

PUBLIC AGENCY MASTER LEASE FINANCING:

This financing program is available to all public agencies and provides lease financing to implement energy projects. The SoCalREC has prequalified a set of financial institutions to provide the financing and has developed a simplified, standard agreement which the public agencies would execute with the financial institutions. Financing energy projects has been a challenge for many public agencies, including the County, due to the lack of standard, non-biased financing program terms and conditions. This is a program that will also benefit the County and ISD in delivering more energy projects.

EEMIS EXPANSION:

As mentioned earlier, ISD's EEMIS has been made available to other local governments to provide energy management services. Other agencies pay an incremental portion of ISD's EEMIS operating costs to join (which is a fraction of the cost of purchasing their own system) and ISD receives revenues for administration, implementation and technical support. To date, over 70 cities have signed on to using ISD's EEMIS.

WATER/ENERGY NEXUS:

This program seeks to design and implement a pilot with water agencies that integrates energy savings projects in water system operations and in upgrading water utilities buildings and facilities. Because handling water is energy intensive, emphasizing certain water system enhancements in wholesale delivery, retail delivery and wastewater treatment has a dual societal benefit in conserving both water and energy. SoCalREC will work with a handful of water utilities to develop programs for broader acceptance.

COMMUNITY ENERGY EFFICIENCY PROJECT MANAGEMENT SYSTEM (CEEPMS):

This program will provide a few pilot cities with the capability to identify and track energy efficiency projects through an online permit tracking system which prioritizes and expedites the permitting process. The software to be used will match permits applied for against incentives available to ensure the project owner is aware of them.

#### **4. LARC AND OTHER ACTIVITIES**

##### Los Angeles Regional Collaborative for Climate Action and Sustainability (LARC)

ISD serves as the County's representative to the LARC. LARC is an organization committed to supporting climate mitigation and adaptation initiatives by convening representatives from local government, non-profits, academia, and industry to define meaningful approaches to reaching collective climate and sustainability goals. Current LARC efforts are described below.

Utilizing ARRA funding, ISD oversaw the creation of a Regional Greenhouse Gas (GHG) Inventory for all of the cities and unincorporated areas of in the County. The Inventory has been completed and the final report and findings were released in April of 2013. GHG inventories at the incorporated city level (and unincorporated County) and by zip code were combined with other publicly available demographic information to provide an analysis of GHG production under a variety of unique benchmarks. A next step for this program will be to run a similar analysis of GHG inventories using more disaggregated energy consumption information from the utilities, combined with powerful building energy consumption modeling developed by UCLA and U.C. Davis and County Assessor database information about individual buildings and parcels.

In July 2012, the LARC published a study, titled "*Mid-century Warming in the Los Angeles Region*", which utilizes sophisticated computer projections done by UCLA to predict the potential impacts climate change will have in the Los Angeles region. This preliminary work predicts climate impacts due to unabated GHG production in the region at 1.2 kilometer scale across the region. Additional analysis related to precipitation projections is currently underway and will be released in coming months. More information on this work can be found at [c-change.la](http://c-change.la). As a result of this effort, the Board has recently instructed many of the County's departments to report on what efforts they are undertaking to address changes in their public facing operations due to these predicted impacts.

LARC, in conjunction with Los Angeles County Metro, received a \$1 million grant from the Strategic Growth Council to complete a Regional Climate Action Plan, titled "*A Greater LA: The Framework for Climate Action and Sustainability*". Utilizing these grant funds, the LARC will build from the scientific studies described above to conduct an extensive, stakeholder driven process to develop cohesive climate mitigation policies and model ordinances for use by jurisdictions within the County.

### Legislative and Regulatory Analysis and Support

ISD, working with other departments and the CEO's Intergovernmental Relations Office (IGR), continues to monitor and track pertinent legislative activities, especially those which support local government and regional GHG reduction programs and projects. Among the key legislation that ISD will continue to monitor is the implementation of AB 32 and Proposition 39 funds.

AB 32 ordered the creation of a carbon emissions market under which emissions allocations could be sold and purchased (Cap & Trade). AB 1532 became law in 2012 and established a framework under which revenues from the State's Cap & Trade market would be utilized to further mitigate GHG production. As described in previous Policy reports, ISD has been participating in regulatory proceedings at the CPUC, CEC and California Air Resources Board where program implementation and funding using these revenues are established. ISD has introduced legislative agenda language which proposes County support and activity for acquiring these funds for the County and other local governments. The initial 2012 and 2013 revenues generated from Cap & Trade market activities was kept in the 2013 State budget to help reduce the budget deficit. However, future years' revenues will be allocated under new legislation.

Proposition 39 was approved by California voters last fall and provides over \$500 million per year to support energy efficiency projects in public buildings, clean energy workforce development programs, and clean energy financing programs. The legislature and the Governor supported using most of this funding for the State's schools. However, the legislation implementing Prop 39 funds did indicate that other public agencies would receive some of this funding in the future.



# Libraries - Sustainable Programs and Initiatives

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Initiative	Locations
Battery Recycling	Some libraries
Ocean Friendly Gardens	Lawndale
Recycling Containers and Recycling	Some libraries
Waste Diversion	Some libraries
Green Cleaning	Wiseburn, Sorensen, Topanga, Malibu, W. Hollywood
Cool Roofs	Some libraries
HVAC Energy Efficient “Economizer”	All libraries
Book Recycling	All libraries
LEED New Construction	New Libraries
LEED EBOM	Some Refurbished Libraries

The County of Los Angeles Public Library has undertaken significant initiatives in order to improve the sustainability of our operations and the providing of service. This focus on sustainable practices and innovations is a part of the Public Library’s push to implement aspects of its Strategic Plan.

The range of initiatives already undertaken by the Public Library varies from the basic, such as office temperature settings and HVAC automated control, to the more extensive, such as LEED sustainable quality new construction or existing buildings operation, the diversion of construction waste into recycling, and other uses.

Planned initiatives will further improve the sustainability of the Public Library’s operations. The installation of “Cool Roofs” and expansion of the battery recycling program would further reduce the energy costs of operations, and divert additional waste from landfills.

## Battery Recycling

The County of Los Angeles Public Library has set up containers and receptacles in a number of libraries throughout the county to collect used batteries from the public and send them to their proper recycling centers. Through this program, the Public Library recycles 15,000 lbs. of batteries every year.

## Book Recycling

The County of Los Angeles Public Library recycles 26,000 lbs. of books and paper yearly. By collecting books which have reached the end of their usefulness and diverting them from landfills, the Public Library takes a further step toward being a responsible steward of the environment.

## Waste Diversion

Construction Waste is an unmentioned side product of modern construction projects. The Public Library routinely collects construction waste from its new construction and refurbishment projects for recycling, diverting over 50% of construction waste from landfills, with the expectation that eventually 90% of construction waste would be diverted.

## Ocean Friendly Gardens

The Public Library, along with a list of sponsors that includes the City of Lawndale, Best Buy, and the Green Gardens Group and Surfrider Foundation, has sponsored the installation of a 1,200 sq. ft. ocean friendly garden at our Lawndale Library. It is estimated that the garden would result in 80% water

savings and greatly reduce the storm water runoff into the adjacent parking lot. The garden now features a native edible landscape as well as a vegetable garden tended by the “Teen Friends”, yielding lots of vegetables for cooking and learning about healthy food choices.

### LEED New Construction

The Public Library approaches new construction as a means to permanently enshrine the values of sustainability that are targeted by the Strategic Plan. By planning for sustainability and energy efficiency from the ground up, the department is taking steps to ensure that ultimately all its facilities will be able to provide valued services to the public in the most efficient way possible.

Library Name	Certification Level	Year Certified
Pico Rivera	LEED Platinum	2014
East Rancho Dominguez Library	LEED Platinum	2012
Wiseburn Library	LEED Gold (EBOM)	2013
Malibu Library	LEED Gold	2012
Topanga Library	LEED Gold	2012
West Hollywood Library	LEED Gold	2012
Sorensen Library	LEED Gold	2011
Diamond Bar	LEED Silver	2011

### LEED EBOM

The Public Library makes every effort to keep its libraries and service operations running as sustainable as possible. To further that end, certain Libraries are targeted to apply for LEED EBOM status. This certification requires that the Public Library operate its facility in line with current and ongoing standards of energy efficiency and environmental stewardship.

If you require any further information regarding County of Los Angeles Public Library sustainable or green initiatives and programs please contact Jim Allen at [jallen@library.lacounty.gov](mailto:jallen@library.lacounty.gov) or 562-940-4145.

DEPARTMENT OF PARKS AND RECREATION  
SURVEY OF DEPARTMENTAL SUSTAINABILITY PROGRAMS  
DECEMBER 10, 2013

## SUSTAINABLE PRACTICES

### **Sustainable Model Park Design**

- Sustainable model park design was developed at Obregon Park. The model park showcases bioswales, permeable surfaces in parking lots, a California native drought tolerant garden, and water conserving irrigation and plant material.

### **Interdepartmental Collaboration to Promote Sustainability**

- Healthy Design Ordinance: Collaboration with Public Health, Regional Planning, and others to enhance the County's sustainability
- Energy User Group with ISD
- LID ordinance
- Drought Tolerant Landscaping Ordinance
- Multibenefit Projects for Stormwater Management with the Department of Public Works Watershed Management Division
- Los Angeles River Watershed TMDL plan with the Department of Public Works.
- Climate Action Plan with the Department of Regional Planning

### **Recycling Bins Installation**

The Department is working with the Department of Public Works Environmental Programs Division to increase opportunities for providing dual trash / recycling bins at our parks.

### **Tree Canopy Analysis (to be completed in 2014)**

CALFIRE-reimbursable funding to be used to produce a park tree inventory for 26 County parks. Seventeen (17) of the 26 will provide inventory (in-kind match) for the \$1M Sustainable Communities Planning Grant / Master Plan. Each tree has up to 14 recorded attributes (type, trunk caliper, maintenance needs, etc.)

### **Sustainable Communities Planning Grant / Master Plan**

The Los Angeles County Department of Parks and Recreation is preparing a Master Plan for Sustainable Parks and Recreation (Master Plan) which will identify and address the park needs of the County's unincorporated communities. The Master Plan will be comprised of individual parks and recreation plans for unincorporated areas. Phase One of this project will focus on six underserved economically disadvantaged communities: East Los Angeles, East Rancho Dominguez, Lennox, Walnut Park, West Athens-Westmont, and Willowbrook. These communities have very low median household incomes, high levels of childhood obesity,

insufficient parkland, and few healthy food options. The Master Plan will address the identified needs through the development of new parks and recreational facilities, improvement of existing ones, and enhancement of recreational services and programs. In doing so, the plan aims to achieve the broader goals of: improving air and water quality; promoting public health; promoting equity; protecting natural resources; reducing automobile usage and fuel consumption; improving infrastructure systems; promoting water conservation; and improving energy efficiency and conservation.

### **Sustainable Park Design**

- **Willowbrook walking path (1,000 linear path) adjacent to Compton Creek**
  - Stormwater BMPs
    - ✓ Stormwater retention and percolation
    - ✓ Drought Tolerant Landscape
  - Energy and CO2 gas emissions reduction
    - ✓ Solar irrigation controller
    - ✓ Tree canopy of added Sycamore trees to mitigate heat island effects
- **CV Dog Park**
  - Energy and CO2 gas emissions reduction
    - ✓ Solar irrigation controller
    - ✓ Tree canopy of Oak and Sycamore trees to heat island effects
    - ✓ LED security lighting
- **Peck Park**
  - Stormwater BMPs
    - ✓ Permeable hardscape
    - ✓ Stormwater on site treatment
- **MLK Exercise Garden**
  - Stormwater BMPs and Water conservation
    - ✓ Stormwater retention and percolation
    - ✓ Climate appropriate planting
    - ✓ California native grass
    - ✓ Drip irrigation
  - Energy and CO2 gas emissions reduction
    - ✓ Solar LED path lighting

### **Sustainable Park Design Guidelines**

The Department has developed Park Design Guidelines to provide guidance toward design and construction of sustainable park facilities. The Park Design Guidelines provides information on sustainable design practices such as:

- USGBC (United States Green Building Council) standards and recommendations which include sustainable sites, energy and atmosphere, material and resources, water efficiency, indoor environmental quality, and innovation in design
- Considerations for use of green alternative energy sources such as photovoltaic solar energy

- Use of landscape pavement material grading, landscaping, materials and methods to improve storm water management and ground water recharge
- Irrigation system and plant design according to plant types water requirements (hydrozones) in compliance with the States Maximum Allowance Water Ordinance
- Landscape plant material list with reduced demand for irrigation water use
- Recommendations to enhance indoor air circulation in maintenance and storage facilities
- Facility maintenance and green procurement practices

### **New Park Standards**

The Department of Parks and Recreation produced park design standards to list available green products, materials and fixtures

### **Public Outreach / Behavioral Changes:**

In order to promote water at County parks educational water and energy conservation efforts, posters were developed by the Department. Each month one poster was forwarded to all County parks for posting to promote park staff and park patrons on water conservation practices.

### **Implementation of First County LEED-EB (Leadership in Energy and Environmental Design for Existing Facilities) Project**

This project was implemented at Placerita Cyn Nature Center and Natural Area a State owned facility operated by the County. Implementation of this project included sustainable design, construction and facility maintenance and procurement practices.

### **Implementation of New LEED Certified Building Projects**

The Department has recently implemented LEED-NC (New Construction) building projects which include:

- Vazquez Rocks New Nature Center Building (LEED NC Platinum certification)
- Arcadia Park New Pool Building Project (LEED NC Silver Certification)
- El Cariso Park New Gymnasium and Community Center Building (LEED NC Silver Certification)
- Alondra Park New Water Play and Skate Park Project (LEED NC Silver Certification)
- Belvedere Park New Pool Building Project (LEED NC currently in construction)
- Helen Keller Project (LEED NC currently in construction)

### **Future Projects with Sustainable Measures**

- **Continuation of the Walking Path along Compton Creek– 3000’ linear feet**
  - Stormwater BMPs and Water conservation
    - ✓ Stormwater retention and percolation
    - ✓ Climate appropriate planting
    - ✓ California native plant material

- Energy and CO2 gas emissions reduction
- ✓ Solar irrigation controller

## WATER CONSERVATION

### **Replacement of Inefficient Plumbing Fixtures at Park Facilities**

The Department has replaced approximately 300 of existing water flushed urinals with waterless urinals to reduce water usage

### **Los Angeles County Eighty Eight Incorporated Cities Water Conservation Forum**

The Department sponsored its annual symposium in 2009 on Reclaimed Water / Plant / Soil Compatibility: *“A Conversation on the Use of Recycled Water and Drought Tolerant Plants in Park Settings.”*

### **Collaboration with Water Purveyors in the County**

The Department has worked closely with Water Districts within the County to promote water conservation at County facilities. These efforts include:

- **Development of County Parks Recycled Water Conversion Master Plan**

The master plan mapped and identified location and distance of existing recycled water mainlines and County park facilities. This data resulted in three phase development of County parks recycled water conversion master plan according to the proximity of the County parks to recycled water mainlines.

- **Implementation of Recycled Water Conversion at County Parks and Golf Facilities**

Implemented of the following recycled water projects has increase the total number of the Department facilities which have been converted to use of recycled water to 18 facilities

- Whittier Narrows Recreation Area
- Whittier Narrows Golf Course
- Los Amigos Golf Course
- Pathfinder Park
- Rimgrove Park

- **Water Conservation through Turf Removal**

280,000 square feet of turf was removed at El Cariso Golf Course to promote water conservation. This project received a \$280,000 rebate from the Los Angeles Department of Water and Power

- **Installation of Smart Irrigation Controllers**

The Department has replaced 254 manually programmed irrigation controllers at 26 park facilities during implementation of **Phase I and II** of the smart controller program with weather based satellite operated irrigation controllers. The Department received \$444,000 in rebates from the Metropolitan Water District and other local water purveyors.

- **Phase III** of the smart controllers program will include replacement of an additional 114 manually operated irrigation controllers at 32 parks.

- **Water Conservation Irrigation System Renovation Projects**

Outdated and inefficient irrigation systems have been replaced with water conserving irrigation systems in several parks and golf course facilities which include Los Amigos Golf Course, El Cariso Golf Course, and the Los Angeles County Arboretum. The El Cariso Golf Project included an \$83,000 rebate and the County Arboretum will be receiving approximately \$260,000 in water conservation incentive program funds from the Metropolitan Water District and Department of Water and Power.

- **Landscape Water Conservation Workshops**

In response to our Department's request to promote landscape maintenance staff knowledge of water conservation practices, the Metropolitan Water District has sponsored water conservation workshops on Water Conservation and Landscaping with California Friendly Plants.

### **Stormwater BMP Concept**

- **Peck Park Water Conservation Park Parking Lot BMP Concept:** The Department developed a concept for Peck Park Parking lot that redesigns it in order to decrease stormwater runoff, improve water quality, and for groundwater recharge.

### **Stormwater Pilot Plan Phase I and Phase II**

Developed a plan to look at devices which will address stormwater management at 5 parks. Study includes hydraulic calculations, detailed drawings and planting palettes. Some of the devices include bioswales, bio-retention areas, pervious paving, green roofs and drought tolerant/native planting areas to address on and off site stormwater runoff volumes.

# ENERGY CONSERVATION

## **Solar Energy Plan**

The Solar Energy Master Plan was created to identify suitable sites for Solar Photovoltaic installation. In response to the state's ambitious goal of renewable energy portfolio standard and AB 32, this plan intends to reduce energy grid dependency and therefore Greenhouse Gas Emissions.

- The Department features the first solar powered community park at Obregon Park in 2010. Other solar projects include solar security lighting at the Los Angeles Arboretum, solar bollard at Kenneth Hahn Regional Park, solar photovoltaic at Alondra pool, Vasquez Rocks visitor center, and Descanso Gardens. A new solar powered gymnasium building in Sorenson Park is underway.

## **Tracking**

Tracking and analyzing the Department's energy and water usage are crucial in the efficient management of utilities. Upon the successful tracking, the Department will monitor the conservation efforts in utilities to foster the behavioral changes.

- Inventorying Meters: The Department owns approximately 160 facilities which have more than 500 electric meters and water meters combined. Inventorying meters will provide the foundation of the utility conservation tracking.
- Benchmarking: The Department works with Energy Network to benchmark the facilities' energy performances.
- CO2 gas emissions reduction is calculated and tracked.
- The Department's solar power production will be tracked and calculated.
- Energy Conservation Report Card is in progress. The Report Card will measure the energy usage reduction of selected facilities to encourage energy conservation.

## **Energy Efficiency Measures**

- Interior Lighting Upgrade in 201
- Outdoor Lighting Security Lighting Upgrade
- Pool Pump Upgrade with Variable Frequency Drive project planned
- New building energy efficiency beyond title 24 requirement via Savings By Design: The Department participates in the Edison's Savings By Design program to ensure the maximum energy efficiency.
- Zero Net Energy Guideline in 2011: The development of zero net energy guideline intends to introduce energy efficiency measures primarily in lightings and the importance of whole building approach.
- Energy Efficiency Measures at selected park sites in collaboration with Energy Network. The Energy Network and its subconsultant engineers will develop a list of energy efficiency projects at selected park sites. The consultant team will provide cost estimates, financial analysis, and Edison's rebate application process (in progress)



**Los Angeles County Department of Parks and Recreation Water and Energy Conservation Task Force**

- The task force was launched to strategize to reduce the Department's water and energy usage.

**Electrical Vehicle Recharging Station in Collaboration with ISD Office of Sustainability**

- Electrical Vehicle Recharging Station will be created at selected park sites.

## **Public Health – Sustainability Efforts**

We are working on several initiatives that will provide opportunities to address issues of sustainability:

- We are in the process of developing a Facility Strategic Plan that contemplates the consolidation of our community clinical and other Public Health business operations into regional service centers. In the development of these facilities we would assume County standard of LEED silver status and elimination of older facilities that are not energy efficient and have become costly in terms of deferred maintenance. We propose to locate the new facilities near public transit modalities and (where possible) in proximity to other County departments that provide health and/or human services;
- Community Health Services is developing a pilot program to provide “video direct observed therapy” for TB patients. Currently, PH staff travel to various locations to observe TB clients ingest their daily dosage of medicine. The pilot would allow the TB client to be observed via video (cell phone, Skype, etc.) by PH staff housed at a PH facility. This would reduce vehicular travel and staff time involved in ensuring the client takes their full course of daily medication.
- Public Health is working with the CEO to consolidate our warehouse operations. We are also considering alternate delivery strategies; and
- We are undertaking efforts to eliminate many of our remaining paper forms and reduce messenger services through electronic form work flow processing.

### **DPH Healthy Design Proposal**

In 2009, the Board of Supervisors instructed DPH, DRP, DPW and other departments [as needed] to develop design standards for building pedestrian-, transit-, and bicycle-friendly developments, promote walking and other outdoor physical activities, which will ultimately be incorporated into the County’s Public Works design standards, and the DRP Healthy Design Ordinance. This effort is ongoing in the form of the Healthy Design Workgroup. Public Health leads this effort with Regional Planning, Public Works, Fire, Parks & Recreation, CEO, Beaches & Harbors, and ISD.

David Dijkstra  
Public Health Administration

## **Los Angeles County Sheriff's Department Sustainability Projects**

The Sheriff's Department is engaged in a comprehensive review and evolution of all facets of Department operations and infrastructure in order to achieve the following sustainability goals:

- Reduce costs (of fuel, energy, food, waste stream, etc.)
- Enhance the ability to stay operational during infrastructure or supply chain disruption (from natural or anthropogenic disasters, embargos, shortages, etc.)
- Meet impending state mandates for greenhouse gas emission reductions, solid waste reductions, and water conservation
- Enhance and expand Education-Based Incarceration (EBI) programs, which provide viable vocational and educational opportunities for County Jail inmates and positively impact recidivism and jail violence rates
- Provide more effective services to the citizens of Los Angeles County while at the same time reduce their tax burden and improve their environment

The following is a synopsis of some of the Department's individual sustainability projects:

### Recycling

The Department has reactivated and refurbished its recycling center at Pitchess Detention Center (PDC). We are recycling a large spectrum of refuse (all plastics [including Styrofoam], metals, paper/cardboard products, chip bags, textiles, rubber bottoms of inmate shoes, food and green waste) generated at PDC. The Department intends to expand its recycling program to other facilities in the near future. Reduced waste going to landfill will result in reduced dump fees, and the recovery of recyclable materials will offset operational expenses.

The recycling center also captures resources that are reusable (such as clothing, trays, carts and crates) and puts them back into use. It also captures inappropriate disposal of batteries and e-waste and diverts them into proper avenues of disposal.

### Composting

The Department has several small composting operations at PDC, and is working with the Department of Public Works on a feasibility analysis for the most appropriate composting system (looking at wind rowing, in vessel, static piles, etc.) to determine the optimal expansion of the operations; PDC's green waste and food waste will be composted and used as a soil amendment for the PDC farm. This will reduce waste going to landfills and the attendant transportation costs (driver, truck maintenance, fuel) and dump fees. Compost production will also obviate the need to purchase soil amendments for Department farm operations.

### Energy Conservation

Working with Internal Services Department (ISD), the Department is nearing completion of the retrofit of environmental controls to an efficient Department-wide standard at all patrol stations. ISD is also in the process of contracting the labor for the retrofit of T-8 florescent 32w bulbs to more efficient 28w bulbs at Sheriff's Department facilities, utilizing a grant from the State Energy Commission.

Our Data Systems Bureau (DSB) is implementing a solution to the necessity of keeping Department CPUs running 24/7 to accomplish necessary scheduled and unscheduled software updates and maintenance. The new solution will allow Department computer users to shut down most of their computer equipment after hours (except network cards, which use only milliwatts of power), and can remotely awaken the computers for updates.

DSB is also working on a FAX-over-IP solution that will replace all the Department's stand-alone fax machines, saving energy, maintenance costs, space and consumables.

### Cook and Chill Expansion

The Department intends to expand its cook-and-chill operation, which currently feeds approximately 3,000 County Jail and municipal contract inmates, to feed the entire County jail population (potentially 20,000 inmates). Cook-and-chill is highly efficient and allows for reduced staffing, reduced procurement of food additives, reduced equipment redundancy, reduced food waste, longer food shelf-life and operational security of the food supply in the event of supply-chain disruption, optimal food procurement opportunities, optimal utilization of Department farm produce, and expanded educational and vocational training opportunities for County Jail inmates.

### Online Reporting

The Department is implementing an online reporting system which will allow citizens, at their option, to generate reports for certain incidents (for instance: lost property, petty thefts or vandalism where there is no workable suspect information) over the Internet rather than have a Department employee respond to their location and take a report. This will provide more timely and convenient service for the citizens, and reduce operational costs for the Department and free up personnel to perform more critical duties.

### Farm Restoration

The Department is reviving farm operations at the PDC campus, with the intent of offsetting significant inmate food costs, providing vocational and educational opportunities for County Jail inmates (nutrition, health, urban farming , community gardening, food processing, agricultural research, greenhouse management, irrigation systems, integrated pest management, etc.), lowering its carbon footprint (from the perspective of offsetting the purchase of non-local food with its attendant production and

transportation footprints), and ensuring a food supply for inmates in the event of supply chain disruption.

The Department has numerous ongoing farm-related sustainability pilot programs at the PDC campus, including pollinator programs (bees and honey production), vermiculture (for soil health and fertilizer production), small scale protein production (talipia and chickens), greenhouse refurbishment for plant propagation, and community gardens. The Department is in the process of hiring a farm consultant to establish a productive system of vegetable and fruit production based on sound and sustainable farming techniques and permaculture principles (see RFP-IS-14255007). These techniques and principals will minimize water use and preserve the aquifer beneath PDC, eliminate the need for inorganic soil amendments, pesticides and herbicides, restore the health of the soil and watershed, enhance Education Based Incarceration programs, and ensure an optimal and sustainable source of inmate food with significant cost savings to the County taxpayer.

The Department has collaborated with numerous educational institutions, including California State Polytechnic University at Pomona, University of California at Davis Extension, and UCLA for guidance and research opportunities related to the farm project, along with other entities such as the Los Angeles Community Garden Counsel and 5-Keys Charter School. These entities are assisting in curriculum development, research projects and vocational training for the inmates.

#### Water Conservation

The Department is employing various water conservation strategies such as improved low flow devices and native species (drought tolerant) landscaping. The Department is exploring other water conservation technologies such as grey water recovery and drip irrigation.

#### Energy Production

The Department is exploring distributed energy generation options at its facilities, in order to lower energy costs, enhance operational capabilities in the event of grid/supply chain disruption or energy price instability, and reduce greenhouse gas emissions. ISD is retooling its solar photovoltaic (PV) rooftop capacity modeling to enable analysis of potential parking lot canopy PV capacity at the Department's patrol stations. Canopy PV solar would potentially be a less costly solution than rooftop solar, given that most roofs at these facilities are aged, and would have the added benefits of extending the life of our patrol fleet and mitigating urban heat island effect. The Department is looking at energy storage solutions (solar batteries), since grid-tied solutions would not be effective in the event of grid disruption. Solar batteries (the technology and cost of which have significantly improved in recent years) are also a better option than backup diesel generators from a greenhouse gas emission perspective.

The Department is also exploring solar thermal applications for its various facilities. Solar thermal is 96% efficient, and would be a very cost-effective option particularly at the smaller-demand facilities, such as patrol stations.

For its larger, energy intensive facilities, the Department is exploring (with ISD) other distributed energy solutions such as fuel cells. Some fuel cell technologies maximize efficiency by capturing “waste heat” from the fuel cell process for hot water generation. Most fuel cell technologies available today require methane, but are capable of utilizing biogas, and provide the opportunity for carbon credits versus traditional grid sources.

#### Transportation

The Department, again with ISD assistance, is converting its bus fleet to low emission diesel busses. The Department has migrated from gasoline powered vessels for its maritime operations to diesel powered vessels, which can with minimal modification utilize biodiesel.

The Department is also testing alternative energy vehicles in other applications (including its patrol and unmarked car fleets) and will be seeking funding for an all-electric vehicle pilot program, given that the technology has finally progressed to the point that some all-electric vehicles are capable of functioning in the patrol operational environment, and are in fact superior in numerous categories to traditional pursuit-rated vehicles (in safety, emissions, handling, acceleration, noise, energy costs, etc.), and, despite significant up-front purchase costs, are in fact cheaper over the projected lifetime of the vehicles due to significantly lower maintenance and fuel costs, not to mention greenhouse gas emission reductions.

The Department, with the assistance of ISD, will be utilizing hybrid trucks in some of its Facilities Maintenance operations.

#### Training

The Department is utilizing its intranet to provide more sustainable, cost effective, training practices. For instance, AB 1825 mandates that all Department supervisors receive sexual harassment prevention training every two years. In the past, it was required that supervisors and managers travel to a centralized location for the training, or that instructors travel throughout the County to provide the training. Utilizing the Learning Net, the Department has recently developed and implemented an “all online” training solution for this mandate. All supervisors and managers now receive the interactive training, a test component, and certification for the training online.

## Treasurer and Tax Collector Sustainability Projects

The Treasurer and Tax Collector (TTC) is constantly seeking to implement process improvements and efficiencies that enhance customer service and/or lower operating costs. Oftentimes these improvements and efficiencies align with the sustainability movement. The following is a summary of existing as well as planned efforts.

### Existing Sustainability Efforts

<u>Name</u>	<u>Description of Improvement</u>	<u>Impact</u>
North County property tax payment office	For two days each December and two days each April, taxpayers can pay their property tax bills in person in the City of Lancaster.	Decreases emissions and air pollution by reducing the number of taxpayers driving downtown.
Public Administrator operations	Utilizes hybrid cars to conduct fieldwork (e.g., estate investigations). Auction off decedent estate assets to the public, which includes second-hand dealers.	Utilization of hybrid cars reduces emissions and air pollution. Auctioning off assets allows items such as furniture and electronics to be reused/refurbished and reduces landfill.
Check imaging and electronic transmission of financial data	The TTC images checks from taxpayers and transmits data electronically to the banks.	Eliminates the need to physically transport checks to the banks, which decreases emissions and air pollution.
Check and document shredding	After checks are imaged they are shredded. All TTC personnel utilize individual recycle bins to collect non-essential documents for recycling.	The vendor utilized by the TTC sends 100% of shredded materials to paper mills to be recycled, which reduces landfill and saves trees.
Videoconferencing	The TTC has implemented videoconferencing at the Public Administrator warehouse and Business Continuity location.	Virtual meetings eliminate the need to travel for certain "face-to-face" meetings with offsite staff, which decreases emissions and air pollution.

### Planned Sustainability Efforts

<u>Name</u>	<u>Description of Improvement</u>	<u>Impact</u>
One-stop tax bill printing and mailing	The TTC currently utilizes two private contractors and the Internal Services Department to print and mail annual property tax bills. The TTC will be issuing a Request for Proposals in 2014 for a one-stop print and mail shop.	<p>Aside from the operational benefits of eliminating multiple handoffs in the process (increasing efficiency and accountability), the following are the benefits in the area of sustainability:</p> <ul style="list-style-type: none"><li>• Tax bills will be printed on blank paper on an as-needed basis rather than printing on millions of preordered, blank tax forms (reducing spoilage/waste).</li><li>• Lower emissions and air pollution by eliminating vehicles involved in pickups and drop-offs from multiple vendors.</li><li>• Reviewing and approving documents online reduces paper copies and eliminates the need to drive to facilities for quality control/oversight.</li></ul>

For questions regarding this information, please call Keith Knox, Assistant Treasurer and Tax Collector, at 213-974-0703, or via e-mail at [kknox@ttc.lacounty.gov](mailto:kknox@ttc.lacounty.gov).